

Title (en)

Surface treated calcium carbonate and its use in waste water treatment

Title (de)

Oberflächenbehandeltes Calciumcarbonat und dessen Verwendung zur Abwasserbehandlung

Title (fr)

Carbonate de calcium traité en surface et son utilisation pour le traitement des eaux usées

Publication

EP 1982759 A1 20081022 (EN)

Application

EP 07005856 A 20070321

Priority

EP 07005856 A 20070321

Abstract (en)

The present invention relates to a process for the purification of water, wherein a surface-reacted natural calcium carbonate is brought into contact with the water to be purified, the surface-reacted natural calcium carbonate being the reaction product of a natural calcium carbonate with an acid and carbon dioxide, which is formed in situ by the acid treatment and/or supplied externally.

IPC 8 full level

B01J 20/04 (2006.01); **C02F 1/28** (2006.01); **C02F 1/56** (2006.01); **C02F 103/28** (2006.01); **C02F 103/32** (2006.01)

CPC (source: EP KR US)

B01J 20/04 (2013.01 - KR); **B01J 20/043** (2013.01 - EP US); **B01J 20/20** (2013.01 - EP US); **B01J 20/28004** (2013.01 - EP US); **B01J 20/28054** (2013.01 - EP US); **B01J 20/28057** (2013.01 - EP US); **C01F 11/18** (2013.01 - US); **C02F 1/28** (2013.01 - KR); **C02F 1/281** (2013.01 - EP US); **C02F 1/5236** (2013.01 - US); **C02F 1/5245** (2013.01 - US); **C02F 1/54** (2013.01 - US); **C02F 1/56** (2013.01 - EP KR US); **B01J 2220/42** (2013.01 - EP US); **C01P 2004/51** (2013.01 - US); **C01P 2004/80** (2013.01 - US); **C01P 2006/12** (2013.01 - US); **C02F 1/283** (2013.01 - EP US); **C02F 2101/305** (2013.01 - EP US); **C02F 2101/327** (2013.01 - EP US); **C02F 2103/28** (2013.01 - EP KR US); **C02F 2103/32** (2013.01 - EP US); **Y10T 428/2982** (2015.01 - EP US)

Citation (search report)

- [DAX] WO 0039222 A1 20000706 - PLUSS STAUFFER AG [CH], et al
- [A] US 2613181 A 19521007 - GREEN WALTER H, et al

Cited by

EP2801555A1; WO2014180631A1; CN105618004A; BE1027936B1; RU2650926C2; JP2014533196A; EP2679638A1; CN104487523A; KR20150028264A; AU2013283726B2; US10717042B2; US10351710B2; EP2957603A1; WO2014064073A1; WO2014001063A1; EP3176222A1; US11041074B2; US10065872B2; EP3202719A1; US11230481B2; EP2805923A1; EP2805924A1; WO2014187613A1; US9328222B2; EP3202720A1; US10226747B2; US11130689B2; EP2418177A1; WO2012020056A1; EP2949708A1; EP3070057A1; WO2016146404A1; US10046992B2; US10843932B2; EP2548848A1; WO2013014026A1; EP2589430A1; WO2013064492A1; US8785687B2; US8809582B2; US9403988B2; US9410039B2; US9598295B2; EP2565165A1; WO2013030185A1; EP3050852A1; WO2016120238A1; US10850996B2; WO2021219458A1; WO2021219529A1; EP2921173A1; EP2926797A1; WO2015140308A1; WO2015150011A1; EP3175835A1; WO2017093002A1; US10463693B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1982759 A1 20081022; EP 1982759 B1 20110907; AR 065715 A1 20090624; AT E523248 T1 20110915; AU 2008228253 A1 20080925; AU 2008228253 B2 20120202; BR PI0807998 A2 20140624; BR PI0807998 B1 20180731; CA 2679248 A1 20080925; CA 2679248 C 20151006; CL 2008000779 A1 20081107; CN 101626830 A 20100113; CN 101626830 B 20121003; CO 6220844 A2 20101119; DK 1982759 T3 20120102; EG 25583 A 20120311; EP 2180944 A1 20100505; EP 2180944 B1 20140521; ES 2375849 T3 20120306; HK 1123768 A1 20090626; HR P20140734 T1 20140829; JO 3015 B1 20160905; JP 2010521297 A 20100624; JP 5351057 B2 20131127; KR 101338784 B1 20131209; KR 20090123905 A 20091202; MX 2009009545 A 20090916; NZ 578932 A 20120330; PA 8772801 A1 20081119; PE 20081626 A1 20081209; PL 1982759 T3 20120430; PT 1982759 E 20111223; RU 2009138752 A 20110427; RU 2482068 C2 20130520; SI 1982759 T1 20120229; TW 200914380 A 20090401; TW I445670 B 20140721; UA 102995 C2 20130910; US 2010086987 A1 20100408; US 2014209831 A1 20140731; US 8728322 B2 20140520; US 9745212 B2 20170829; UY 30968 A1 20081031; WO 2008113840 A1 20080925; ZA 200905533 B 20101027

DOCDB simple family (application)

EP 07005856 A 20070321; AR P080101026 A 20080313; AT 07005856 T 20070321; AU 2008228253 A 20080319; BR PI0807998 A 20080319; CA 2679248 A 20080319; CL 2008000779 A 20080318; CN 200880007616 A 20080319; CO 09086897 A 20090819; DK 07005856 T 20070321; EG 2009091380 A 20090923; EP 08718058 A 20080319; EP 2008053337 W 20080319; ES 07005856 T 20070321; HK 09103422 A 20090414; HR P20140734 T 20140729; JO P20080143 A 20080319; JP 2009554025 A 20080319; KR 20097019821 A 20080319; MX 2009009545 A 20080319; NZ 57893208 A 20080319; PA 8772801 A 20080319; PE 2008000495 A 20080318; PL 07005856 T 20070321; PT 07005856 T 20070321; RU 2009138752 A 20080319; SI 200730784 T 20070321; TW 97107301 A 20080303; UA A200910655 A 20080319; US 201414231920 A 20140401; US 44988508 A 20080319; UY 30968 A 20080319; ZA 200905533 A 20080319